IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:

David A. Wood et al.

Group Art Unit: 2194

Examiner: Hoang, Phuong N.

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For: System and Method for Enhancing

Communication Between Devices

in a Computer System

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CLAIMS

Per our conversation, please see the claims below for the Examiner's Amendment. Thank you.

IN THE CLAIMS:

1. (Currently amended) A computer system comprising:

a first device;

a second device coupled to said first device;

wherein said first device is configured to convey a first request to said second device, wherein said second device is configured to receive said first request, wherein said second device is configured to detect a temporarily unavailable condition, wherein said second device is configured to convey a response to said first device corresponding to said first request, and wherein said response includes a delay value corresponding to said temporarily unavailable condition; and

wherein said delay value corresponds to a first value in response to said temporarily unavailable condition corresponding to a first type of condition and wherein said delay value corresponds to a second value in response to said temporarily unavailable condition corresponding to a second type of condition; and

- wherein, in response to said first device re-conveying said first request to said second device in excess of a retry limit, said first device and said second device are configured to cause an error recovery mechanism to be initiated.
- 2. (Previously presented) The computer system of claim 1, wherein said first device is configured to receive said response, and wherein said first device is configured to reconvey said first request to said second device at a time corresponding to said delay value.

3. (Previously presented) The computer system of claim 1, wherein in response to receiving the first request said second device is configured to generate said delay value according to a type of said temporarily unavailable condition detected at the second device.

4. (Cancelled)

- 5. (Original) The computer system of claim 1, wherein said second device is configured to calculate said delay value using one or more variables that correspond to one or more previous temporarily unavailable conditions.
- 6. (Original) The computer system of claim 1, wherein said delay value corresponds to an encoded value.
- 7. (Previously presented) The computer system of claim 1, wherein one of different types of error recovery mechanism is to be initiated based on a type of temporarily unavailable condition at the second device.
- 8. (Currently amended) A computer system comprising:
 - a communications medium;
 - a first device coupled to said communications medium; and
 - a second device coupled to said communications medium;

wherein said first device is configured to convey a first request to said second device, wherein after receiving said first request said second device is configured to detect a temporarily unavailable condition, wherein said second device is configured to convey a response to said first device

including a delay value corresponding to said temporarily unavailable condition at the second device;

- wherein said second device is configured to store historical data corresponding to previous temporarily unavailable conditions, wherein said second device is configured to determine said delay value based on the stored historical data; and
- wherein, in response to said first device re-conveying said first request in excess of a retry limit, said first device and said second device are configured to cause an error recovery mechanism to be initiated, and wherein said error recovery mechanism is configured to perform an action according to said response.
- 9. (Original) The computer system of claim 8, wherein said communications medium comprises a switching network.
- 10. (Original) The computer system of claim 8, wherein said communications medium comprises a shared bus.
- 11. (Original) The computer system of claim 8, wherein said communications medium comprises an arbitrated loop.
- 12. (Original) The computer system of claim 8, wherein said second device is configured to calculate said delay value using one or more variables that correspond to one or more previous temporarily unavailable conditions.
- 13. (Original) The computer system of claim 8, wherein said delay value corresponds to an encoded value.
- 14. (Cancelled)

15. (Currently amended) A method comprising:

conveying a first request from a first device to a second device;

detecting a temporarily unavailable condition at said second device;

generating a delay value corresponding to said temporarily unavailable condition;

storing historical data corresponding to previous temporarily unavailable

conditions at said second device and determining said delay value based
on the stored historical data;

conveying a response corresponding to said first request from said second device to said first device, wherein said response includes said delay value; and

in response to said first device re-conveying said first request to the second device in excess of a retry limit, initiating an error recovery mechanism.

- 16. (Previously presented) The method of claim 15, further comprising:
 - re-conveying said first request from said first device to said second device at a time corresponding to said delay value.
- 17. (Cancelled)
- 18. (Previously presented) The method of claim 15, further comprising:

 determining the retry limit associated with the first request.
- 19. (Original) The method of claim 15, wherein said generating further comprises:

determining a type of said temporarily unavailable condition; and

generating said delay value according to said type of said temporarily unavailable condition.

20. (Original) The method of claim 15, further comprising:

generating said delay value using one or more variables that correspond to one or more previous temporarily unavailable conditions.

- 21. (Previously presented) The computer system of claim 1, wherein one of different types of error recovery mechanism is to be initiated based on the delay value corresponding to the response conveyed from the second device to the first device.
- 22. (Previously presented) The computer system of claim 1, wherein said second device is configured to generate said delay value based on a number of outstanding responses corresponding to the temporarily unavailable condition.
- 23. (Previously presented) The computer system of claim 1, wherein said second device is configured to generate said delay value according to a set value for each type of temporarily unavailable condition, a programmed value for each type of temporarily unavailable condition, or a dynamically calculated value for each type of temporarily unavailable condition.
- 24. (Previously presented) The computer system of claim 1, wherein said second device is configured to store historical data corresponding to previous temporarily unavailable conditions, wherein said second device is configured to determine said delay value based on the stored historical data.

- 25. (Previously presented) The computer system of claim 24, wherein said delay value may be generated according to a static heuristic based on the previous temporarily unavailable conditions.
- 26. (Previously presented) The computer system of claim 24, wherein said delay value may be generated according to a dynamic algorithm based on the previous temporarily unavailable conditions.
- 27. (Previously presented) The computer system of claim 1, wherein said first device is configured to receive said response including the delay value, wherein said first device is configured to re-convey said first request to said second device at a time corresponding to the delay value, and wherein if the second device detects a temporarily unavailable condition when the first request is again received at the second device, the second device is configured to determine a second delay value based on the temporarily unavailable condition detected at the second device.
- 28. (Previously presented) The computer system of claim 3, wherein said type of said temporarily unavailable condition is a temporarily loss of system resources, a temporary lack of processing resources on the second device, or a lack of a valid virtual to physical address translation.
- 29. (Previously presented) The computer system of claim 1, wherein said first device is configured to ignore said delay value received from the second device and independently determine when to re-convey said first request.
- 30. (Currently amended) A computer system comprising:
 - a first device; and
 - a second device coupled to said first device;

- wherein said first device is configured to convey a first request to said second device, wherein after receiving said first request said second device is configured to detect any of a plurality of temporarily unavailable conditions, wherein a delay value is associated with each of the plurality of temporarily unavailable conditions and each delay value is a programmable value;
- wherein said second device is configured to convey a response to said first device including the delay value associated with a detected one of the plurality of temporarily unavailable conditions at the second device; and
- wherein the delay value corresponds to a first value in response to the detected temporarily unavailable condition corresponding to a first type of condition and wherein the delay value corresponds to a second value in response to the detected temporarily unavailable condition corresponding to a second type of condition.